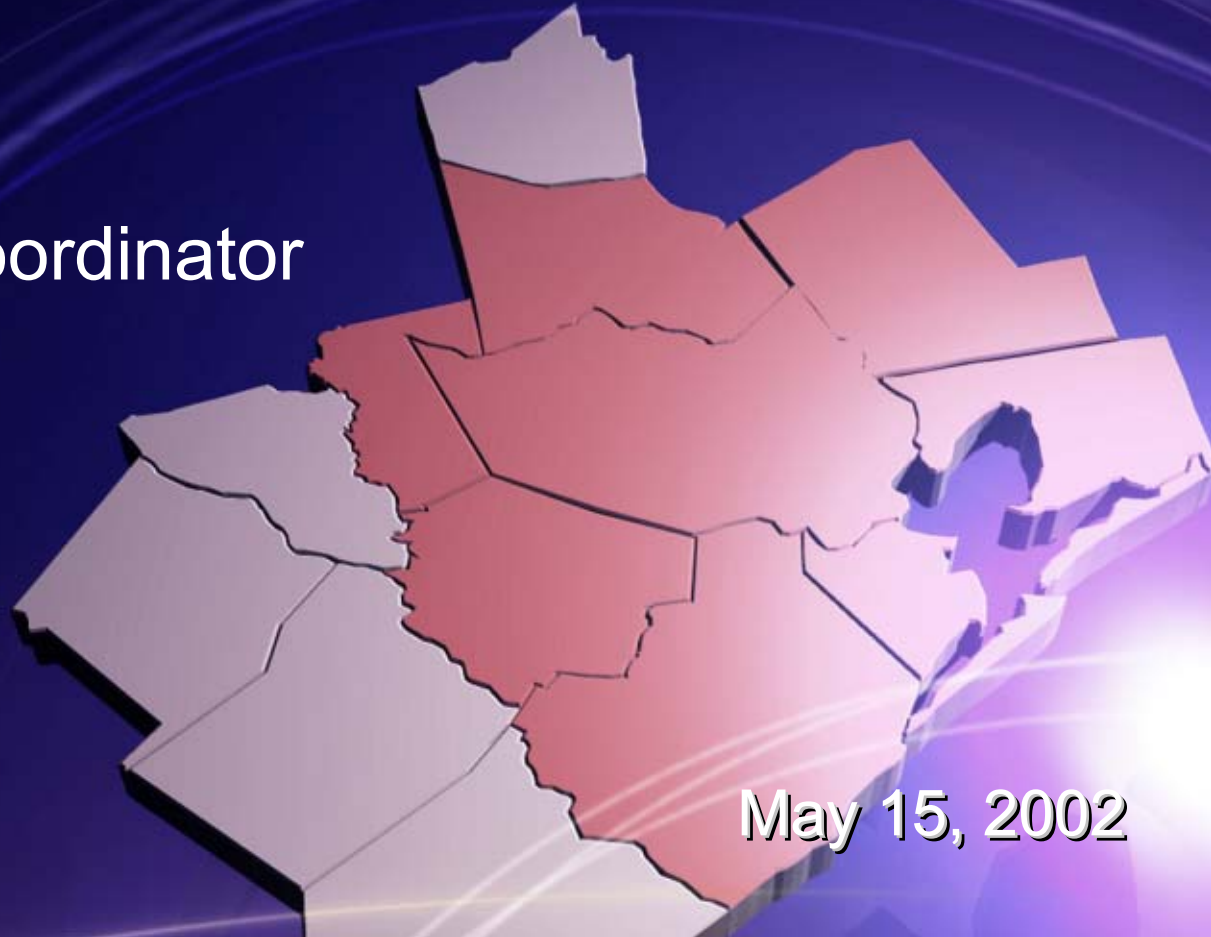


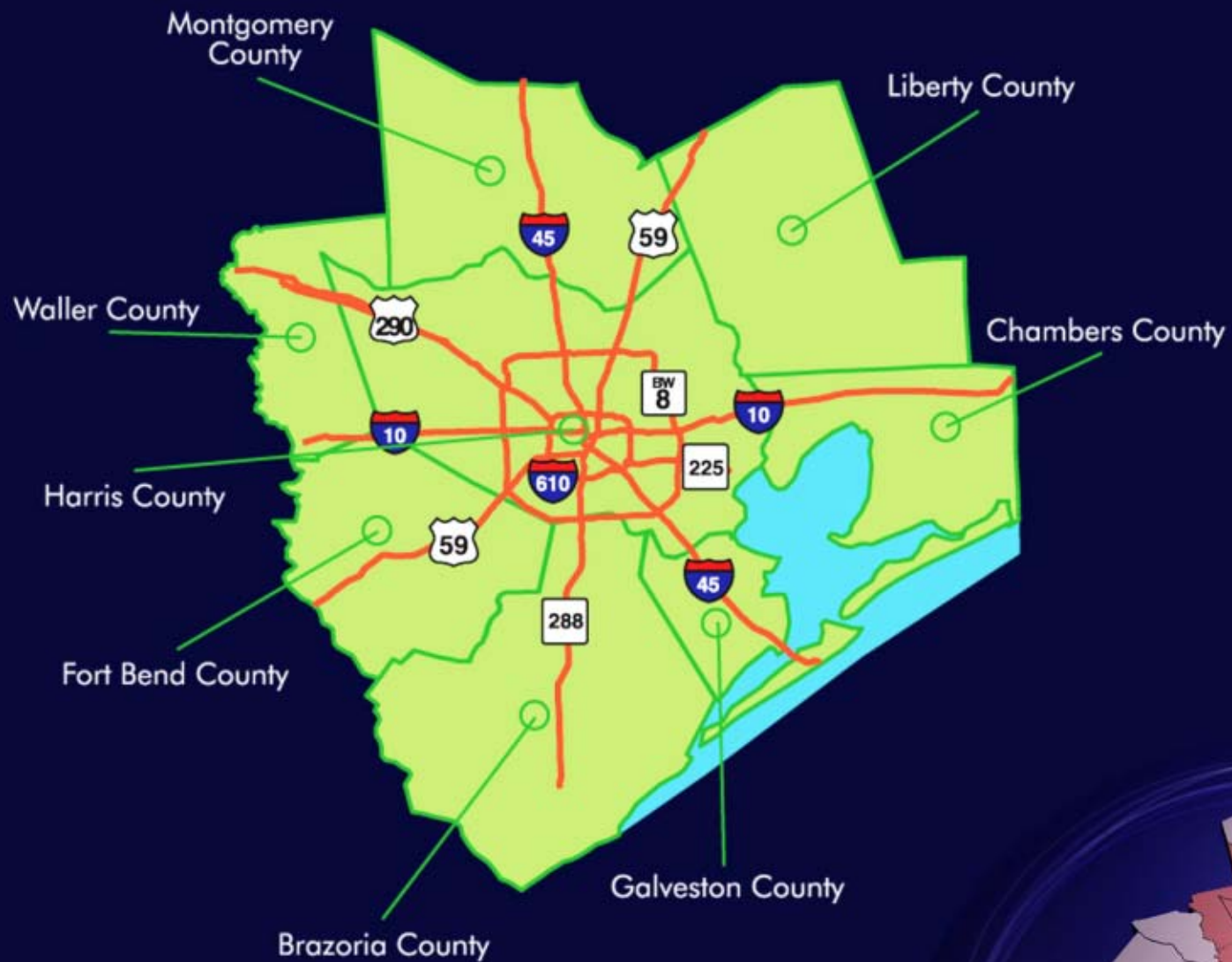
Integration of Traffic and Transportation System Data for Use in Travel Demand Analysis

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TMA Statistics

- 8,000 square miles
- Population – 2000: 4.5 million, 2030: 8 million
- 27,400 miles of roadway
- 125 million weekday VMT
- 250,000 weekday transit patrons



Overview

- Background information on data used
- How it's collected and managed now
- Our plan for the future
 - Collection of data
 - Management of data



Background

- Historically large amount of data collected
- Data is an important “feedstock” for travel demand analysis networks
- End users need to be more involved in collection, transmission and management of data.



Background

- Description of the roadway system is a critical input to travel demand analysis
- Currently maintain networks in GIS
- Attempt to relate data to roadway network segments



Current Data

Typically have used

- Traffic counts
- Point-to-point and segment speeds
- Vehicle classification counts
- Roadway “inventory” data
- Management of data



Current Data

Roadway segment data

- Roadway inventory
- Speed data



Current Data

Roadway segment data

- Level of detail not consistent
 - Mile marker vs. Segments
 - Hard to relate to network



Current Data

Point data

- Vehicle counts
- Vehicle classifications



Current Data

Point data

- Not from common universe of points
- Time consuming to relate to network



Our Ideas for the Future

Concept of a “universe of data observation points”

- Less focus on data management and transfer
- More focus on data collection needs



Our Ideas for the Future

Segment data

- Roadway inventory
 - Define universe of facilities
 - Allow for inclusion of new roadways automatically
 - Meets future needs of more detail modeling networks



Our Ideas for the Future

Segment data

- More detailed segments
- Capture begin and end points more efficiently
- GPS
- Include images in database
- Helpful for future reference
- Land use information



Our Ideas for the Future

- Use of ITS data
- Methods for summarizing data
- Methods for archiving data



Summary

- Slow to adopt RDBMS and other data management technologies
- Beyond individual data collection efforts
- Integrated data collection and management processes



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